

at a time is the norm.

The method of bathing is sequential. The bird perches near the edge of the pool and wets the anterior parts of its body with the beak, then turns about and splashes water into the plumage by flapping the wings and fanning the tail. This lasts about one minute and is followed by thorough preening for about the same period. During the preening the bird often flutters the wings rapidly and fluffs up the body plumage several times. This process is repeated several times, till the bird is either satisfied or disturbed by another bird. A thorough prolonged preening now follows, sometimes for 15 minutes. Exposed branches are preferred for this

purpose and the bird often calls during the preening.

During rains the bird dries the plumage by preening, fluttering the wings, fluffing up the body, but was rarely found having a regular bath.

At times *M. viridis* was observed drinking and bathing with several other species of birds at the same pool, the fairy bluebird, goldfronted chloropsis, and jungle myna being the common associates. Inter and intraspecific chases were also recorded when *M. viridis* being the most aggressive, rarely tolerated other species.

December 15, 1989

H.S.A. YAHYA

21. COURTSHIP FEEDING IN THE INDIAN HOUSE CROW *CORVUS SPLENDENS* VIEILLOT

Courtship feeding occurs in many groups of birds during the breeding season. It involves offering of food by a partner to its mate.

While studying the nesting behaviour of the Indian house crow *Corvus splendens* in the Lower Gangetic plain, I noticed that the male offers food to the female just after mate selection. The female begs for food with wide gape, quivering of tail, spreading and trembling of wings in the attitude of a young bird. Courtship feeding continues through the entire period of incubation till a week after the hatching of nestlings. The male feeds the female on the average 10.3 times per hour (62 observations in 3 hours) through the entire period of incubation. With the hatching of nestlings, the sequence of such feeding comes down to an average of 5.6 times per hour, as the male now shares its

responsibility of bringing food for the nestlings.

In view of the fact that courtship feeding in the house crow begins immediately after mate selection and continues through incubation till a week after hatching of nestlings, it may be suggested that the behaviour in this case involves three distinct functions, namely:

(1) It begins as a token of final ritual of mate selection (Lack 1940), (2) Later it continues to maintain and strengthen the pair bond (Armstrong 1965), and (3) It also provides proper nourishment to the incubating female (Lack 1968).

January 16, 1990

SUDHIN SENGUPTA

REFERENCES

ARMSTRONG, E.A. (1965): Bird display and behaviour. Dover, New York.

LACK, D. (1940): Courtship feeding in birds. *Ibis*. 57: 169-78.

LACK, D. (1968): Ecological adaptation for breeding in birds. Methune & Co.

22. OCCURENCE OF THE ASHY MINIVET *PERICROCOTUS DIVARICATUS* (RAFFLES) IN KERALA

The ashy minivet *Pericrocotus divaricatus* breeds in north-east China, Japan, Korea and the Soviet Far East, migrating in winter to Taiwan, the Phillipines and most of south-east Asia, including, rarely, Burma.

On 7 December 1989 I was watching a mixed hunting party in the fairly open moist-deciduous forest along the edge of the road close to the DFO's office at

Thekkady in the Periyar Sanctuary, Kerala. Species present in the party were the yellowbrowed bulbul, ashy and racket-tailed drongos, velvetfronted nuthatch, whitebellied tree pie, grey tit, small green barbet, golden oriole and both small and scarlet minivets. The latter, at a height of about 8 m in the canopy of a small tree on the very edge of the forest, were joined by

another minivet, the plumage of which was white below, grey and dark grey above, and lacking any other colour at all. I had been joined a few minutes before by Joseph Karoor of the Forest Department, and we were both immediately aware of the difference of this new arrival. Binoculars had hardly been focused on it when the bird was harassed by one of the racket-tailed drongos and chased in two circuits around the spot where we stood until it disappeared. In spite of its rarity

and the short time it was in view there was no doubt in either of our minds that it was indeed an ashy minivet *Pericrocotus divaricatus*. This is the first record of the species in Kerala, and the third for the Indian mainland, the earlier two being Navarro's (*JBNHS* 62: 303) and Santharam's (*JBNHS* 85: 430-31).

February 1, 1990

ANDREW ROBERTSON

23. BULBULS FEEDING ON THE PULP OF *CASSIA FISTULA* POD IN PT. CALIMERE WILDLIFE SANCTUARY, TAMIL NADU

At Pt. Calimere Wildlife Sanctuary, two species of bulbuls, namely redvented bulbul *Pycnonotus cafer* and whitebrowed bulbul *Pycnonotus luteolus* occur. Vijayan (1975) studied the ecological isolation of these two species of bulbuls at Pt. Calimere and had recorded 36 species of fruits being eaten by them. He also recorded flowers, flower nectar and insects as their food. Ali and Ripley (*HANDBOOK OF THE BIRDS OF INDIA AND PAKISTAN*, 1983) mentioned fruits, flower nectar, insects and spiders as being the food of both bulbul species.

At Pt. Calimere Wildlife Sanctuary, during three years of study on frugivory by birds and mammals, it was noticed that both the bulbul species visit *Cassia fistula* L. (Caesalpinaceae) trees to eat the pulp of the pods. *Cassia fistula* is a commonly occurring tree in Pt. Calimere and the pods are cylindrical, measuring 45 to 75 cm in length, containing 70 to 120 seeds, one centimetre long, embedded in a sweet blackish pulp and separated by woody septa from each other. The ripe fruits are brown and the fruiting season is from May to August.

During the months of June and July both bulbul species visit this plant to feed on the pulp. The bird

perches on the fruit, pecks the hard, thick fruit wall and after breaking it, eats the pulp. The pulp alone is swallowed, and the seeds are not eaten. Each feeding visit lasts for a few minutes and repeated visits are made.

Available literature records the two species feeding mostly on fleshy berries and drupes and usually ingesting the seed with the pulp. In one exceptional case, viz. *Rivea hypocrateriformis* recorded by Vijayan (Ph.D. thesis, University of Bombay, 1975), the fruit is a capsule and hence easily pecked and eaten. In the case of *Cassia fistula* the bird has to break open the hard fruit wall of the pod to eat the pulp. Hence, this feeding method and the food item (pulp of a pod) are new to the bulbul's feeding biology.

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December 5, 1989

P. BALASUBRAMANIAN

24. YELLOWRUMPED FLYCATCHER *FICEDULA (MUSCICAPA) ZANTHOPYGIA (NARCISSANA)*: A NEW ADDITION TO THE AVIFAUNA OF THE INDIAN SUBCONTINENT

On 30 April 1989 around 1530 hrs I, Sandeep Mehta, Mukund Thakker and Jayashree Sethna were bird-watching at Semadoh, along a streambed near the bus-stand in the Melghat Sanctuary (21.30°N, 77°E) in Maharashtra. There were magpie-robins *Copsychus saularis*, whitebrowed fantail flycatcher *Rhipidura aureola* and some species of warblers flitting around in the streambed. We went down to have a closer look at

them and from near a rock pool, a small golden yellow and black bird flew away further downstream towards the bridge on our approach. Since it appeared interesting I cautiously followed. It was a flycatcher-like bird and I noted the following description.

Sparrow-sized, colours mainly black upperparts and yellow underparts. Upper parts: head, back, wings